Granular FCA—An Introduction

Bernhard Ganter

Technische Universität Dresden bernhard.ganter@tu-dresden.de

Abstract. The conceptual hierarchy represented in a concept lattice always refers to a formal context, that is, to a fixed section of data. In practice, there may be different choices for such an excerpt, for different reasons. The data may contain errors or omissions, it may differ from one observer to another. There are approaches that address such problems, building on notions like fuzziness, partiality, and more recently, granularity. The authors have investigated possibilities of combining formal concepts with so called rough sets. This leads to notions of conceptual approximations. An introduction to the basic ideas is given as an invitation to further research.